

**WHAT IS CLAIMED IS:**

1. A method of storage management, the method comprising:  
storing data on a high reliability high performance storage medium;  
backing up said data on a high reliability low performance storage  
5 medium; and  
after said backing up, copying at least some of said data from said high  
reliability high performance storage medium to a low reliability high  
performance storage medium and freeing space occupied thereby on the high  
reliability high performance storage medium.  
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2. The method of claim 1, wherein said data is classified according to  
characteristics thereof and is backed up at a rate that is dependent on the  
respective characteristics of said data.
- 15 3. The method of claim 1, wherein said data is backed up at a rate  
dependent on at least one from a group including at least: an occupancy level of  
said high reliability high performance storage, availability of back-up media and  
access to said high reliability low performance storage medium.
- 20 4. The method of claim 1, wherein said transferring is performed  
substantially immediately after said backing up.
5. The method of claim 1, wherein said data include medical images.
- 25 6. A system for storing computer-readable media, said system comprising:  
a high performance high reliability storage medium configured for initial  
storage of data;  
a low performance high reliability storage medium configured for backup  
of data initially stored on said high performance high reliability storage medium;  
30 and

a high performance low reliability storage medium, configured to receive data transferred from said high performance high reliability storage medium, after said data has been backed up on said low performance high reliability storage medium.

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7. The system of claim 6, further comprising: a storage policy sub-unit configured to determine when to backup data on said low performance high reliability storage medium.

10 8. The system of claim 7, wherein said storage policy sub-unit is also configured to determine when to transfer data from said high performance high reliability storage medium to said high performance low reliability storage medium.

15 9. The system of claim 6, wherein said high performance low reliability storage medium is higher volume than said high performance high reliability storage medium.

10. The system of claim 6, wherein said high reliability high performance  
20 storage medium is configured to have a mean time between failure which is at least ten times higher than a mean time between failure which said low reliability high performance storage medium is configured to have.

11. The system of claim 6, wherein said high reliability high performance  
25 storage medium is configured to allow at least ten times as many random read/write/rewrite operations per unit of time as said high reliability low performance storage medium is configured to allow.

12. The system of claim 6, further comprising: a third level of storage comprising at least one low performance high reliability storage media disconnected from said high performance high reliability medium.

5 13. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps of storage management comprising:

storing data on a high reliability high performance storage medium;

backing up said data on a high reliability low performance storage  
10 medium; and

after said backing up, copying at least some of said data from said high reliability high performance storage medium to a low reliability high performance storage medium and freeing space occupied thereby on the high reliability high performance storage medium.

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14. A computer program product comprising a computer useable medium having computer readable program code embodied therein of storage management the computer program product comprising:

computer readable program code for causing the computer to store data  
20 on a high reliability high performance storage medium;

computer readable program code for causing the computer to back up said data on a high reliability low performance storage medium; and

computer readable program code for causing the computer after said backing up, to copy at least some of said data from said high reliability high  
25 performance storage medium to a low reliability high performance storage medium and free space occupied thereby on the high reliability high performance storage medium.

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